

## ABSTRACT

### A METHOD AND APPARATUS FOR LINE QUALITY ESTIMATION IN A MOBILE COMMUNICATION NETWORK

A method and apparatus for link quality estimation of a potential TDMA-based wireless communication link between a mobile station (10) and a target base station (16a-e). The mobile station (10) receives a signal on a channel frequency of the target base station (16a-e) for measuring a link quality and identifying the target base station (16a-e) simultaneously based on the same received signal. The mobile station (10) qualifies the measurement if the target base station (16a-e) was identified properly. If not, the measurement is discarded. Measurements can then be tied to specific base stations more reliably, and are at the same time up to date when reported. This provides for secure connections and enables a tighter frequency reuse for enhancing the overall traffic capacity in the network.